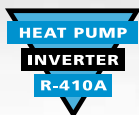


Daikin Inverter Ducted Systems



A traditional central-air system made better with Daikin Constant Comfort inverter technology.

The Daikin Inverter Ducted line is a **cost-effective alternative** to traditional high-efficiency gas furnace/AC systems. These new Daikin products provide more comfort because they are equipped with **Daikin Constant Comfort inverter** technology. Daikin Inverter Ducted systems offer up to **100% heating capacity** when the outside temperature is **as low as 14°F** (systems can operate in heating mode **down to 0°F**), making them **cheaper** to run than traditional heat-pump systems in most climates. They are also more **compact** and **quieter** than traditional units.

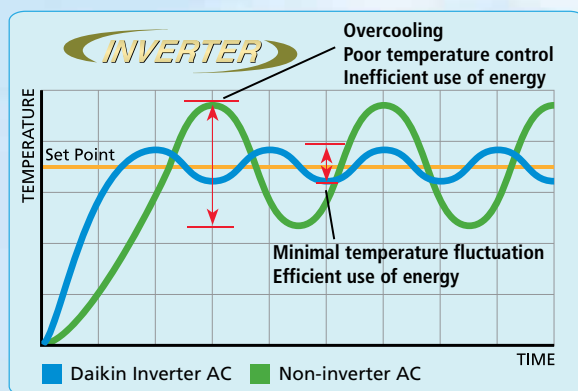
Daikin Inverter Ducted systems are also energy efficient:

- Up to SEER 18.15, EER 13.9 and HSPF 8.92
- Energy Star Tier II rated
- Qualifies for the \$300 Tax Relief Act of 2010



Daikin Constant Comfort inverter technology

Daikin Inverter Ducted systems do not maintain the set temperature by abruptly stopping and starting. Daikin Constant Comfort inverter technology allows them to start softly and maintain the setpoint by varying the speed of the compressor.



Top-of-the-line components

Daikin systems extract thermal energy from the air and “pump” the heat in or out of the home to heat and cool it.

On Daikin Inverter Ducted systems, the condensing units contain swing compressors because they are more efficient and reliable than other compressor types found in ordinary air conditioners or heat pumps. Because the compressor is the heart of any cooling and heating system, we build our own (more than a million a year).

Swing Compressor



The indoor fan coil unit of the Daikin Inverter Ducted system contains an Electronically Commutated Motor (ECM) that provides improved system performance and user comfort by automatically adjusting its speed to provide the factory pre-set optimal airflow. The fan motor also uses less energy than a typical permanent split capacitor motor (PSC) due to its soft start and higher efficiency at lower loads.



Key Benefits

Superior comfort

Daikin Constant Comfort inverter technology maintains the desired temperature by varying the speed of the compressor. Since the system runs longer in comparison to standard on/off systems in most environments, filtered air is nearly always flowing. This can eliminate large temperature swings and can help reduce humidity.

High energy efficiency

A big benefit of Daikin Constant Comfort inverter technology is that almost continuous operation reduces the system's energy consumption – just as a car is more efficient traveling on a highway than in stop-and-go traffic. Inverter compressors reduce power consumption as much as 30% compared to conventional fixed-speed equivalents.



Qualifies for the \$300 Tax Relief Act of 2010!

Worry-free operation

A conventional system's hard starts generate heat and stress that can damage its vital components. A Daikin Inverter Ducted system starts softly, doesn't run in stop-start fashion and seldom needs to run at full speed. Its advanced compressor also has fewer parts to wear out.

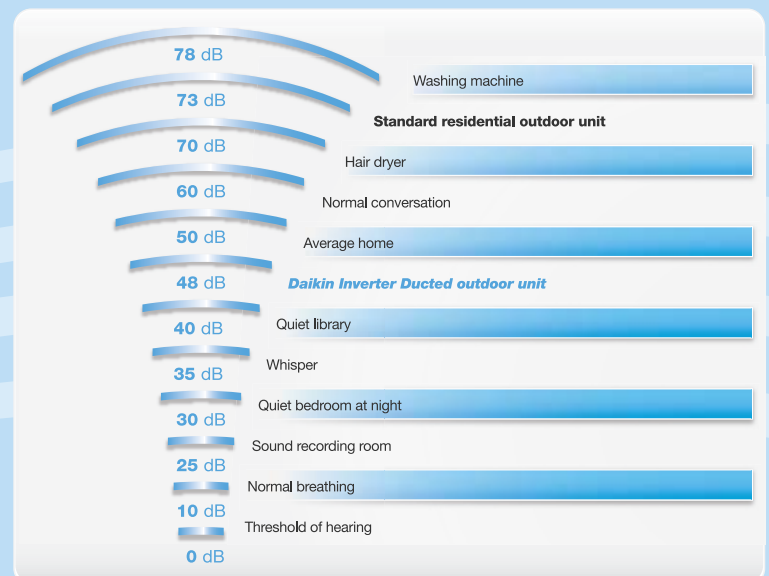
Daikin air-source heat pumps heat well even in low-ambient conditions, so there is no need to use and store fossil fuels. Having no burner inside the house results in:

- Less maintenance
- No risk of fire or gases from spilled fuel
- No risk of injury from carbon monoxide emissions

Sound Reduction

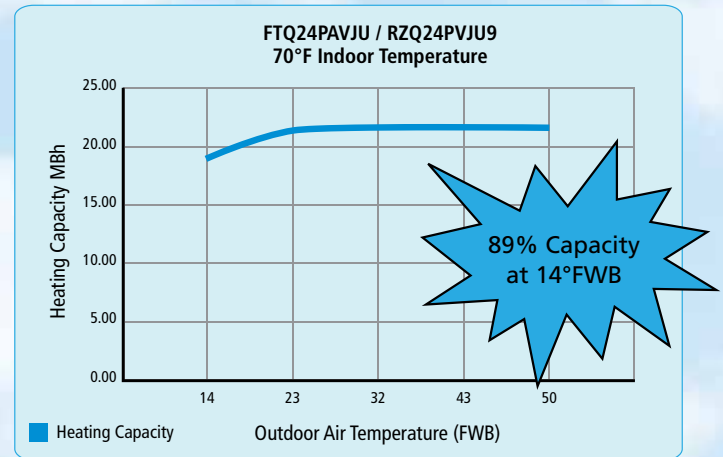
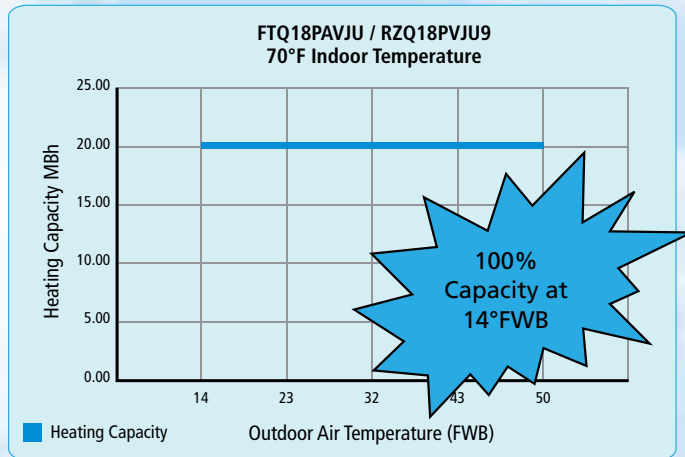
Daikin Inverter Ducted systems have sound-reducing features such as compressor sound attenuators. But they're also quieter than conventional systems because they have fewer moving parts and rarely run at full speed.

Sound Level Comparison



Superior heating capacity in low-ambient conditions.

Traditional residential heat pump systems may require backup electric heating whenever the outside temperature is below 45°F. Daikin Inverter Ducted systems provide comfortable heating down to 0°F, with up to 100% capacity available as low as 14°F. They can also operate in cooling mode from 23°F to 115°F. In most climates, this makes installation easier since no supplemental electric heater needs to be installed.



Electric heater options

Electric heater options are available for applications where the heating design conditions are below 0°F, the customer requires emergency back up for piece of mind or the heating capacity requires a boost for those extreme cold design days. To optimize the heating performance, installation cost and operation cost of Daikin Inverter Ducted systems, two different methods may be selected:

Method 1 – Booster Heater:

For models that allow electric booster heater operation in combination with heat pump operation, the thermo-on setpoint for the electric heater is programmable. The electric heat can be energized between 7.2°F and 2.7°F below the remote controller heating setpoint and de-energized between 3.6°F below and 0.9°F above the remote controller heating setpoint.

Method 2 – Electric Heater Only (Lockout)*:

For models that allow only electric heat operation, the thermo-on setpoint for the electric heater is set to be energized 1°F below the remote controller heating setpoint and de-energized at 1°F above the remote controller heating setpoint.

Model Name	Electric Heater Capacity				
	3kW	5kW	6kW	8kW	10kW
FTQ18PAVJU	●	■	■	✗	✗
FTQ24PAVJU	●	■	■	■	■

● Electric heater operation with heat pump is allowed

■ Only electric heater operation is allowed

✗ Not allowed

Features

- Wide lineup of field-installed electric heater options from 3kW to 10kW
- Integrated heater control relays and logic to minimize cost
- Electric booster heater operation in combination with heat pump operation now possible
- Reduced operational deadband for increased user comfort
- During electric heater operation, the indoor unit fan is fixed in H (High) speed regardless of the controller setting
- The operating condition of the electric heater is programmable via a field setting.

* BRP2A81 ABC terminal kit is required for method 2

The best heating and cooling systems deserve the best controls – like the Daikin Navigation Controller.

Navigation Controller BRC1E71 (Optional)

Simple operation. Large and clear display Auto-changeover. Advanced scheduling. Independent setpoints.



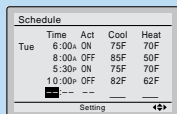
The Navigation Remote Controller is the latest addition to Daikin's controls suite, which offers scalable control architecture optimized for our technology. The wall-mounted controller features a backlit LCD display as well as intuitive menus. The menu displays are now available in English, French or Spanish languages.

Schedule

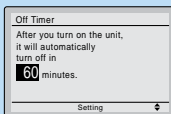
A scheduling feature enhances flexibility by allowing three selectable weekly schedule pattern options: 7-Day, 5+2 (Weekday + Weekend) and 5+1+1 (Weekday + Saturday + Sunday). The schedule supports up to 5 On/Off operations per day and has the ability to set new individual occupied or setback cooling and/or heating setpoints per operation.

Auto-changeover

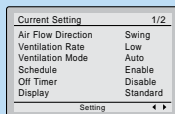
The Navigation Remote Controller features auto-changeover. Auto-changeover mode allows the optimal room temperature to be maintained without the user having to change the mode. It automatically switches the indoor unit's mode (heat or cool) according to both the room temperature and temperature setpoints. When in the heating mode, changeover to cooling mode shall occur at cooling setpoint +1°F (0.5°C). When in the cooling mode, changeover to heating mode shall occur at heating setpoint –1°F (0.5°C).



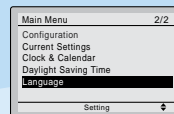
Weekly schedule



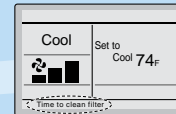
Guide on display



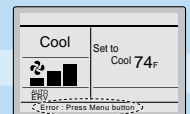
All status on display



Eng./Fr./Sp. language selectable



Maintenance notice



Error notification

Optional Controllers



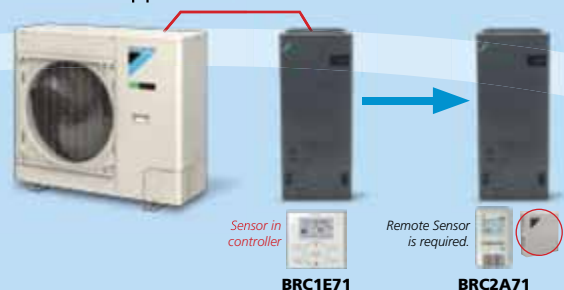
Navigation
Controller
BRC1E71

Simplified
Controller
BRC2A71

Wireless
Controller
BRC4C82

The FTQ/RZQ is not equipped with a return air sensor. The sensor in the local remote controller (factory set) or remote sensor (KRCS01-4B) is utilized to help control the indoor unit, whichever is applicable.

Remote sensor is required when BRC1E71 is not located in optimum position to adequately sense the room temperature condition or when the simplified (BRC2A71) or Wireless (BRC4C82) controllers are used.



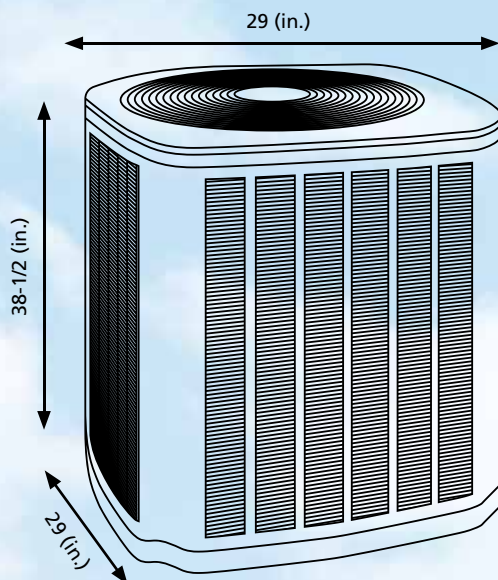
Easy to install and built to last.

A Daikin Inverter Ducted outdoor unit is not as large and bulky as the outdoor unit on a conventional system. More than one of the compact and lightweight units can be fitted in the bed of a standard pickup truck.

Space savings

Footprint: 47% savings

Volume: 58% savings



Standard high-efficiency outdoor unit



Daikin's compact outdoor unit

Ease of installation features

- Reduced installation time with integrated electronic expansion valve and printed circuit boards
- Volt-free float switch integration option
- Corrosion-resistant coating on outdoor unit heat exchanger
- Indoor fan coil unit with up flow or horizontal right configurations
- Heating and Cooling Fan Auto mode can be configured separately
- Dual-voltage 208-230V/1/60 Hz power supply
- Optional electric resistance heat
- Gravity-fed drain connection

FTQ/RZQ Accessories	
Navigation Remote Controller	BRC1E71
Simplified Wired Remote Control*	BRC2A71
Wireless Remote Controller	BRC4C82
Remote Sensor Kit	KRCS01-4B
Wiring Adapter PCB (interface with humidifier, OA damper/fan)	KRP1C75 ¹
Group Control Adapter PCB (connects to external BMS)	KRP4A74 ²
External Control Adapter for Outdoor Unit	DTA104A53 ²
Fixing Box	KRP1B101 ³
Air Filter	FIL 48-61
Insulation Kit (vertical)	DPI 48-61/20
Insulation Kit (horizontal)	DPIH 48-61
Electric Heater Kit	HKR-03, HKR-05C, HKR-06, HKR-08C, HKR-10C

¹ Need 24VAC power supply.

² Need 16VDC power supply.

³ Fixing box installed beside the unit.

*Optional faceplates available to provide a more intuitive user interface and to disable specific functions.

The Daikin Difference: We think of everything, and we make it all.

For more than 80 years, Daikin has designed and produced advanced, high-quality cooling and heating equipment for residential, commercial and industrial applications.

We devote more resources to research and development than any of our competitors. We are also the only company that makes every major component used in its systems. This allows us to optimize every element.

With a global presence that stretches from Asia to Europe to South America, you can be assured that our products have been proven to perform in a multitude of climates.

Indoor Units – FTQ_PAVJU				
Model		FTQ18PAVJU		FTQ24PAVJU
Power Supply		1ph 208/230V 60Hz		
Refrigerant		R-410A		R-410A
Refrigerant Control		Electronic Expansion Valve		
Maximum Overcurrent Protection (MOP)		A	15	15
Rated Cooling Capacity		btu/hr.	18,000	24,000
Rated Heating Capacity		btu/hr.	20,000	27,000
Airflow Rate (H/L)		cfm	600/420	800/560
External Static Pressure Range		in. W.G.	up to 0.5	up to 0.5
Unit Condensate Connection		in. O.D.	3/4 (fpt)	3/4 (fpt)
Pipe Connections	Gas	in.	5/8 (Braze)	5/8 (Braze)
	Liquid	in.	3/8 (Braze)	3/8 (Braze)
External Finish		Fully Insulated, painted steel cabinet with gray finish		
Protection Devices		Fan Motor Thermal Protector		
Weight		lbs.	169	
Dimensions (H x W x D)		in.	53-1/4 x 22 x 24	

Outdoor Units – RZQ_PVJU9				
Model		RZQ18PVJU9		RZQ24PVJU9
Power Supply		1ph 208/230V 60Hz		
Compressor Type		Hermetically sealed swing type compressor		
Maximum Overcurrent Protection (MOP)		A	20	20
Power Consumption (Cooling/Heating)		W	1,695	2,431
Sound Pressure Level (Cooling/Heating)		dB(A)	48/49	49/51
Operating Range – Cooling (Outdoor)		°F DB	23 - 115	23 - 115
Operating Range – Cooling (Outdoor) (with optional wind baffle)		°F DB	0 - 115	0-115
Operating Range – Heating (Outdoor)		°F DB	0 - 77	0 - 77
Operation Current (Cooling and Heating)		A	7.37	10.57
Max. Piping Length		ft.	98	98
Max. Height Difference		ft.	98	98
Dimensions (H x W x D)		in.	30-5/16 x 35-7/16 x 12-5/8	
Weight		lbs.	150	150



Certified Efficiency Performance Values						
AHRI Number	Outdoor Model	Indoor Model	EER 95°F	SEER	COP 47°F	HSPF 47°F
4098969	RZQ18PVJU9	FTQ18PAVJU	13.9	18.15	3.7	8.92
4098975	RZQ24PVJU9	FTQ24PAVJU	12.5	18	3.6	8.89



WARNINGS

- Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any inquiries, contact your local Daikin sales office.



Use of the AHRI Certified™ mark indicates a manufacturer's participation in the certification program. For verification of certification for individual products, go to www.ahridirectory.org



Organization:
DAIKIN INDUSTRIES, LTD.
AIR CONDITIONING MANUFACTURING DIVISION

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF COMMERCIAL AIR CONDITIONING, HEATING, COOLING, REFRIGERATING EQUIPMENT, COMMERCIAL HEATING EQUIPMENT, RESIDENTIAL AIR CONDITIONING EQUIPMENT, HEAT RECLAIM VENTILATION, AIR CLEANING EQUIPMENT, MARINE TYPE CONTAINER REFRIGERATION UNITS, COMPRESSORS AND VALVES.



Organization:
DAIKIN INDUSTRIES
(THAILAND) LTD.

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF AIR CONDITIONERS AND THE COMPONENTS INCLUDING COMPRESSORS USED FOR THEM.



All of the Daikin Group's business facilities and subsidiaries in Japan are certified under the ISO 14001 International standard for environmental management.



© 2010 Daikin Industries, Limited.

Daikin® Daikin AC Absolute Comfort® and its design are registered trademarks of Daikin Industries, Limited. All rights reserved.



Daikin AC (Americas), Inc.
1645 Wallace Drive, Suite 110
Carrollton, TX 75006 USA
www.daikinac.com
866-4DAIKIN
972-245-1510

Dealer Information

PCDIDUSE11-03R

Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this brochure without notice and without incurring any obligations.